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Capital Planning Manual

A Guide to the Approval Process for Health Capital Projects

July, 1995

1. Introduction

Assessment and prioritization of capital needs is a component of the health planning process and the provincial capital budgeting process. The process outlined in this manual has been developed to assist provincial health authorities and Government provide appropriate direction and control over health capital expenditure and ensure that each potential project is considered on the basis of relative merit and health care benefit.

The basic features of the capital approval process are as follows:

- There are two types of capital grants available from the Alberta Public Works, Supply and Services (APWSS) capital budget - major capital projects and capital upgrading projects. Capital funds are disbursed to provincial health authorities for projects proposed in their capital plans and rated as high priorities in a provincial capital plan prepared by the Minister of Health, in consultation with the Minister of Alberta Public Works, Supply and Services, and approved by Government.

- A major capital project involves a provincial capital expenditure exceeding $ 1 million. A capital upgrading project is a project requiring a one-time provincial capital expenditure not exceeding $ 1 million. Capital upgrading grants are used to maintain, repair or upgrade buildings or their systems when this work, for practical purposes, could not be done on a regular basis, using operating funds.

• Capital budget spending limits are announced three years in advance. Approval of new projects and project schedules are managed so that expenditures are contained within annual budget spending limits.

• Capital funding is requested by submitting a capital plan to Alberta Health by August 31st each year. This plan should identify, justify and prioritize needed major capital projects and capital upgrade projects.

• Provincial capital guidelines are used to assess whether proposed projects should be prioritized and considered for approval. These guidelines are the key criteria which must be met by each project included in a capital plan. Capital projects and capital upgrading projects, are considered by Government for funding only if they comply with these guidelines.

• A programming study must be completed before requesting provincial funds for a major capital project. This study will specify the project's functional and program requirements, test its physical feasibility and provide a space and budget plan.

• The Minister of Health prepares a provincial priority list for major capital projects each year. Provincial priorities for major capital projects are determined by using a rating scale. Approval of new capital projects is announced only after the provincial priority list is approved by Government. The maximum level of provincial funding for a major capital project is set, based on the agreed scope of work, when it is approved.

• Capital upgrading projects which comply with provincial capital guidelines are funded each year based on regional and provincial priorities and subject to availability of budgeted funds. The Minister of Health, in consultation with the Minister of Alberta Public Works, Supply and Services, establishes provincial priorities for these projects each year. The Minister of Public Works, Supply and Services approves capital upgrading projects as early as possible in each fiscal year.

2. The Regional Capital Plan

Each provincial health authority should submit a capital plan to Alberta Health by August 31st each year - identifying and prioritizing all capital projects and capital upgrading projects that are needed. Capital planning is a three step process which involves broad consultation within each region, with other regions and with Alberta Health and Alberta Public Works, Supply and Services.

Alberta's process for capital decision-making relies on information in these capital plans to determine which projects are most needed from a provincial perspective. Each capital plan typically covers a three to five year period or longer and is linked to a services plan and financial plan. It should prioritize capital investments based on their importance to meeting strategic and financial goals. The capital plan should be modified as strategic goals shift and should be reviewed and revised each year.

Step 1: Needs Identification, Assessment and Screening

The services plan is typically the starting point in identifying and assessing capital needs. The services plan and capital plan are inter-related and often need to be considered in parallel. A capital plan requires direction as to which specific services need to be accommodated. The services plan must take into account the adaptability and condition of available facilities and the cost of attempting to adapt those facilities.

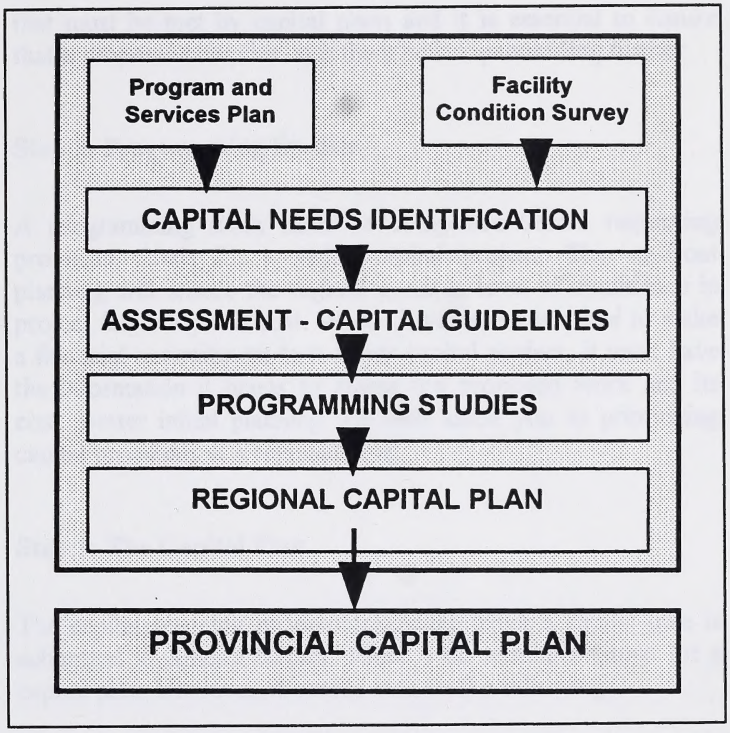

Figure 1: The Regional Capital Planning Process

The need for capital expenditure may also be identified by voluntary boards of management within a region or by community health councils. The Healthcare Facilities Condition Survey process developed by Alberta Public Works, Supply and Services can be used by health authorities as a tool for evaluating the condition and performance of a facility. It provides a consistent methodology which assists in assessing proposals from a regional and provincial perspective as well as in maintaining an inventory of health facilities.

Potential capital needs need to be assessed to determine which warrant more detailed investigation or analysis. You should adopt criteria to assess and prioritize various proposals, thereby setting out the principles which will guide your decision making. Establishing such a process is the best way of setting clear expectations and limitations on what is acceptable.

Funds for a programming study should be requested for projects that benefit your region as a whole and comply with provincial capital guidelines. These guidelines are key criteria

that must be met by capital plans and it is essential to ensure that a proposal complies with them before proceeding further.

Step 2: Programming Studies

A programming study must be completed before requesting provincial funds for a major capital project. This up-front planning will ensure the highest possible level of confidence in project feasibility and cost. When Government is asked to make a financial commitment to a major capital project, it must have the information it needs to assess the proposed work and its cost. Better initial planning will also assist you in prioritizing capital proposals at a regional level.

Step 3: The Capital Plan

The capital planning process concludes when a capital plan is submitted to Alberta Health. There is no standard format for a capital plan. However, it should include the following:

Major Capital Projects:

1. A summary description of each major capital project in the plan to identify the physical and/or functional problems which the project will address and to identify the proposed scope of work and the cost;

2. An assessment of compliance with provincial capital guidelines and a programming report for each major capital project in the plan; and

3. An indication of the priority assigned to each major capital project included in the plan.

Capital Upgrading Projects

1. A summary description of each capital upgrading project in the plan to identify the physical and/or functional problems which the project is intended to address and to identify the proposed scope of work and the cost; and

2. An indication of the priority assigned to each capital upgrading project included in the plan.

3. Provincial Capital Guidelines

Government will only consider funding major capital projects which comply with provincial capital guidelines. These guidelines are key criteria which capital proposals must meet to be included on the provincial priority list. Before requesting funds for a programming study, it is your responsibility to ensure that the project fully complies with these guidelines. Each project included in your capital plan should:

1. Focus on Needs - Not Wants. The capital investment must be proportionate to the expected benefits or improvement and the relative condition of the facility. Expenditures should be targeted to improving patient or resident safety, quality of care or efficient use of resources.

2. Consider Alternatives to Institution-Based Services. Health facilities should only accommodate programs or services that could not be more reasonably or economically delivered in alternative community settings.

3. Ensure Operating Cost Effectiveness or Economy. If the primary objective of a project is to achieve operating cost savings, the capital expenditure must provide a good return on investment (i.e., within 5 years) in terms of operational savings. All projects should take advantage of opportunities to achieve efficiencies by shifting service emphasis or rationalizing programs. The project must not perpetuate fragmentation or duplication of health services.

4. Analyze Alternatives Using Financial Techniques. The project, based on a financial analysis of alternatives, must represent the most reasonable capital solution.

5. Correlate Capital Expenditure to Age and Condition of Facilities. The age and condition of the physical facilities must warrant the proposed action. The typical life-span of a health facility should approximate a minimum of forty years in Alberta provided there is no intent to appreciably change functions or activity.

6. Adhere to Regional Inpatient Service Targets. The capital project must not result in a regional bed supply exceeding targets established in your Services Plan or in the Alberta Health Business Plan.

7. Maximize Utilization of Existing Service Capacity. Reasonable consideration must be given to using other facilities in better condition - before proposing to construct, upgrade or replace a facility. Conversion, redesignation or relocation of programs, on an interim or permanent basis, should be considered as an alternative to new facilities.

8. Ensure Reasonable Distribution of Health Services. The project must represent a practical approach to delivering health services in the region and/or community. If it is intended to improve access to services, reasonable access must not already exist in terms of factors such as travel distance within the region or to adjacent regions.

9. Recognize Obligations For Cost Recovery. Provincial funds are not provided for a project, or its components, which could be financed from ancillary revenues. Accommodation for private sector health service delivery or commercial activities should be financed through future lease revenues generated from that space.

10. Ensure Commitment of Financial Support from All Parties. Any requirement for financial contributions by municipalities, through the requisitioning process, should be identified. Funds for commissioning or ongoing operations must be allocated in regional operating budgets.

4. Programming Studies

A programming study must be completed before requesting provincial funding for a major capital project. This study will give all parties the information needed to make decisions based on an understanding of alternatives, feasibility, implications and costs.

Requesting Funds for a Programming Study

Funding to complete a programming study, in the form of a capital upgrade grant, may be requested by submitting a proposal to Alberta Health. It is important to ensure that the consultant retained is appropriately qualified to carry out the various tasks. Funding will only be approved if the project to be programmed appears to comply with capital guidelines.

When funding is approved, a Request for Proposals is prepared and sent to at least three qualified consulting firms. Proposals are reviewed, a final consultant selection made and an agreement drawn up and awarded to the consultant of choice. Alberta Health and Alberta Public Works, Supply and Services staff should be consulted in preparing a Request for Proposal, selecting the consultant, negotiating the agreement or contract and kept informed of issues and progress related to the study.

The Programming Study

A programming study transforms problems or needs into a specific plan describing a project as it should be designed. It clearly communicates the operational objectives of a project by describing the programs to be offered and the physical and financial requirements. It analyzes options by examining feasibility and cost and clearly demonstrates the benefits of the project in terms of financial and other factors.

A programming study generally includes ten areas of examination:

- Description of programs and services;
- Activity analysis and projections;
- Evaluation of existing facilities, where applicable;
- Internal program relationships;
- Space plan;
- Conceptual development schemes;
- Site development and land acquisition;
- Equipment schedules;
- Project cost estimate; and
- Financial analysis.

1. Description of Programs and Services

A programming report begins with a description of the facility's current and future role in the community and region. It describes programs currently delivered at the facility, how these programs will be modified by the project, any new programs being introduced and the specific improvements expected. Service relationships or dependencies between this facility and others should be described to convey the larger, regional health care system context. There is no need to repeat information already available in your services plan but it could be referenced where necessary.

2. Activity Analysis and Projection

Workload projections and the staffing required to meet that workload should be documented for reference in planning space requirements. Workload projections should be based on historical

data for each service or program affected by the project and be expressed in as much detail as possible. The staff complement, its work pattern, including peak day shift staffing, and any changes attributable to workload should be documented.

3. Evaluation of Existing Facility

Where the project involves expansion or renovation of a facility, a physical and functional evaluation should be undertaken. Even where a project initially assumes that replacement of a facility is necessary, an evaluation is needed to justify that assumption. There is a clear difference between physical and functional evaluations. Each relates to different aspects of the building as a whole. In order to formulate recommendations on the disposition of a structure, these findings need to be logically considered together.

A functional evaluation measures the adaptability of the building to future operational requirements by identifying and assessing functional inefficiencies and deterrents to operational effectiveness. The functional evaluation results in a clear description of all functional deficiencies to be addressed by the project.

A physical evaluation identifies facility characteristics that do not comply with current codes or detract from the safety and comfort of occupants or efficient physical plant operation. This involves estimating degrees of obsolescence and assessing potential to meet future program objectives.

Conclusions and recommendations of the functional and physical evaluations should clearly identify the problems and deficiencies to be addressed by the capital project and the improvement or corrective measure needed to rectify each problem or deficiency.

4. Internal Program Relationships.

All relevant physical and operational relationships required between program areas should be specified as well as any proximity needs critical to communications, sharing of equipment or circulation of patients, staff and materials. The project may not be able to satisfy all specified relationships. However, at this point, they should be stated clearly. Compromises come later.

5. Space Plan

A space plan describes the space required for each new or affected department or service area. Space planning in a programming study should follow a consistent methodology such as the one described in a document entitled **"Evaluation and Space Programming Methodology"** produced by Health and Welfare Canada. A space plan has two components - schedules of accommodation and room data sheets.

5.1 Schedules of Accommodation

Schedules of accommodation are tables that summarize the net areas, gross department areas and gross building area for the project. Schedules of accommodation should clearly distinguish between new space and renovated space.

Every space element in the project should be listed on the Schedule of Accommodation indicating its net area, the total net and gross departmental area for each department and the total gross building area for the project. The Grossing Factor applied to the net departmental area to determine gross departmental area is referred to as Grossing Factor 1 as defined in the document entitled **Evaluation and Space Programming Methodology**. This allows for circulation, partitions, ducts and mechanical services within the department. Grossing Factor 2 is then applied to the total of all gross departmental areas to produce gross building area. Grossing Factor 2 guidelines are available from Alberta Public Works, Supply and Services.

5.2 Room Data Sheets

Room data sheets consist of descriptions and a conceptual diagram of each space.

Space Descriptions

A brief functional description of each space element should convey an understanding of its use and the criteria used to determine its proposed size (i.e., sized for 10 lockers, to accommodate specific equipment or number of persons working within the space or to meet certain critical dimensions).

The physical description of the space should specify any important internal relationships, adjacencies and conditions as well as important architectural, electrical, mechanical or code requirements

Conceptual Space Diagrams

Conceptual diagrams for each space element serve to illustrate the above functions and relationships. These conceptual layouts are graphic applications of the space descriptions and must demonstrate that the programmed area for the space element is appropriate and needed to accommodate equipment and functions. They are not expected to be in the form of final room designs.

6. Conceptual Development Schemes

Using the information gathered so far, alternative development schemes should be described and a preferred scheme selected using specific criteria. Conceptual layouts of schemes are helpful to illustrate options and assess their feasibility. The preferred scheme should be described in sufficient detail to convey the scope of work, demonstrate feasibility and allow a construction cost estimate to be prepared. The description should communicate, at a minimum, how existing areas of the building will be changed, the placement of any proposed new space and a schedule of renovation and modernization work for the building and its systems.

7. Land Acquisition and Site Development

The use and development of the site should be described - noting constraints that might impact on cost or hamper operational effectiveness. A confirmation of the capacity of the site to accommodate the project, its potential for future expansion, traffic circulation and parking as well as vehicular accessibility is included.

If land must be acquired, identify its location and confirm that it will meet project requirements in terms of buildable area, topography, soil conditions, zoning, environmental constraints and availability of basic utilities. The cost of land and site improvements (with the exception of essential site services within the property line) is a regional health authority responsibility.

8. Equipment Schedules

Moveable equipment and furnishings should be listed and costed. The listing may exclude items that will be reused, included in the construction contract or funded by the health authority.

9. Project Cost Estimate

The final component is a project cost estimate. The total capital cost should be broken down into construction cost and non-construction costs. Each non-construction cost item should be individually estimated with all assumptions noted. The total construction cost estimate should be based on separate estimates for new construction and renovation/ upgrade work - relating each to the gross area involved.

The project cost estimate may include an allowance for project management costs. Project management is a term used to describe the general supervision and control of a capital project exercised by the health authority and its administrative personnel. The kinds of costs included in the project management budget vary with the nature of the project but, generally, may not exceed 1% of the construction cost.

Eligible costs may include travel and honoraria for special meetings associated with the project, office overhead, salaries and wages of project management staff engaged for the project and legal fees.

10. Financial Analysis

Every capital investment must be proportionate to the expected benefits or improvement and must represent the most reasonable capital solution. If a primary objective of a project is to achieve operating cost savings, the capital expenditure must provide a good return on investment in terms of operational savings. The age and condition of the physical facilities must warrant the proposed action and expenditure. The typical life-span of a health facility should approximate a minimum of forty years in Alberta provided there is no intent to appreciably change functions or activity.

The programming study should demonstrate that the project provides an adequate return on capital investment in terms of ongoing annual operational savings. This involves a simple

calculation of the number of years required to pay back the capital investment from annual operating savings that will occur upon completion of the project and as direct result of the project. Savings must relate directly to completion of the project and not be otherwise achievable without the project.

Even if the achievement of operating cost savings is not a primary objective of a project, all projects should take advantage of opportunities to achieve efficiencies health facilities should only accommodate programs or services that could not be more reasonably or economically delivered in alternative community settings.

5. Provincial Capital Plan

The provincial capital budget is managed in accordance with a multi-year provincial capital plan approved by Government. Annual capital expenditure targets are set three years in advance and project approvals and schedules are managed so that expenditures are contained within these spending limits.

Each year, the Minister of Health establishes a provincial capital priority list including capital proposals that comply with provincial capital guidelines. This list is prepared using a rating scale to measure whether a proposal incorporates strategies called for in the Alberta Health Business Plan, responds to demonstrated health needs and provides an acceptable return on capital investment. Projects that best meet these objectives attain higher scores and are listed as higher provincial priorities. Approval of new projects is announced after the provincial priority list and budget plan is approved by Government.

The maximum provincial funding for each project is set when it is approved. The provincial capital budget plan will not be revised if individual projects exceed budget.

Capital Project Rating Scale

Provincial priorities are determined using specific criteria and a rating scale for applying those criteria. The eleven criteria that make up the current rating tool are intended to ensure that provincial funding is directed to encourage and facilitate appropriate, efficient

and effective operational practices. They have been selected to measure whether a project, as proposed:

- responds to a demonstrated health care need:
- incorporates specific restructuring strategies called for in the Alberta Health Business Plan - such as rationalizing programs and services or shifting to ambulatory care or community-based modes of service delivery; and
- provides an acceptable return on capital investment;

Projects are rated on each criterion and the total score is used to establish relative priority. Rating criteria are reviewed annually to ensure that they remain current and consistent with Business Plan objectives. This rating scale can also be used in setting regional priorities.

The criteria must respond to a wide variety of projects and many proposals will not score on all, or even most, of the criteria. It is not the total score that matters as much as the score relative to other projects being considered that determines priority. The eleven criteria currently being used are as follows:

1. The project enables the health authority to increase the overall level of health care service capacity to meet a significant demonstrated health need. This increase would not be possible without the project. (Score "5")

This criterion applies only to projects that are intended to increase overall health service capacity within a region or, in the case of the Alberta Cancer Board or Provincial Mental Health Board, the province as a whole - in response to an unmet need identified in the business plan.

- *Do not score on this criterion if existing health service capacity is only being redistributed geographically (i.e., long term care beds developed in one community to offset downsizing of bed capacity in another community or expansion of emergency facilities in one hospital to compensate for closure of emergency departments in other hospitals).*
- *Do not score on this criterion if only the delivery mode for an existing service is being changed (i.e., expansion of outpatient or day facilities to offset down-sizing of inpatient facilities or development of group living spaces that are directly offset by closure of long term care beds).*

2. The project enables the health authority to rationalize specific programs or services to fewer locations. This will increase operational efficiency (provide service at a lower cost or provide improved service for the same cost). Score "5" for each health program being consolidated at the facility proposed for development. Score "5" if the project is part of a regional strategy to rationalize programs at another facility. Maximum score of "10."

This criterion applies to projects that involve rationalization of major clinical programs (i.e., obstetrics, pediatrics, psychiatry, continuing care services, community care services) to fewer locations (not necessarily a single service site). This criterion also applies to projects where different health services will be consolidated so that they will be managed and delivered at fewer locations (i.e. relocation of community health programs into a hospital building).

3. The project enables the health authority to increase access to institutional continuing care services within the region. (Score "5")

This criterion applies to projects involving the development or expansion of an institutional continuing care program. The objective of development will be to improve access to institutional continuing care services in a community which currently does not have adequate services and/or reasonably convenient access to services in other communities. The project must result in an increase to the total regional bed supply (without exceeding the provincial per capita bed target) or a redistribution of the existing regional bed supply on a more equitable basis.

4. The project provides an adequate return on capital investment in terms of ongoing annual operational savings. If annual savings will pay back the capital investment in more than 5 years but less than 10 years, Score "10." If annual savings will pay back the capital investment in 5 years or less, Score "15."

This criterion requires a simple calculation of the number of years required to pay back the capital investment from annual operating savings that will occur upon completion of the project and as direct result of the project.

- *Annual operating savings must be provided by the health authority.*
- *Savings must relate directly to completion of the project and not be otherwise achievable without the project (i.e., savings from closure of beds would normally not require capital investment).*

5. The project enables the health authority to substitute increased levels of ambulatory care services (i.e., ambulatory clinics, community rehabilitation services, day surgery, geriatric day programs) for inpatient services. This change would not be possible without the project. (Score "5")

This criterion applies to a project that includes expanded facilities for ambulatory care programs, day surgery services, day treatment programs and/or scheduled, periodic respite services. The expansion in ambulatory care service capacity must relate directly to a planned decrease in inpatient services (closure of beds currently in service) at the facility.

6. The project enables the health authority to provide more alternative mental health services in the community based on demonstrated need. This change would not be possible without the project. (Score "4")

This criterion applies to projects that support the Provincial Mental Health Board in achieving strategic directions and priorities articulated in the document "Future Directions for Mental Health Services in Alberta."

- *Score on this criterion if the project includes more preventive and community services such as community/family/home support services, emergency/crisis intervention services, day treatment programs, community residential services, supported employment and vocational rehabilitation programs or school-based programs.*

7. The project enables the health authority to provide alternative continuing care services in the community (based on demonstrated need) by providing health care and support to community housing or by introducing smaller-scale group living options for selected client groups. (Score "4")

This criterion applies to projects involving existing continuing care facilities that directly enable the RHA to initiate alternative continuing care services using a community housing model. Capital grants are not available for the construction of facilities related to these alternative community-based models (i.e., assisted living, foster care, group homes). However, the project may free up operating resources to allow these initiatives to proceed.

- *Do not score on this criterion if provincial capital funding is being requested for construction of a community-based housing model.*
- *Do not score on this criterion if identified clients would not otherwise be eligible for admission to an institutional continuing care program or mental health facility.*

8. The project enables the health authority to increase the overall level of community-based health programs as an alternative to inpatient services or more expensively delivered services. This increase would not be possible without this project. (Score "4")

This criterion applies to projects that involve the development or expansion of community health centre programs - using savings from the downsizing of inpatient capacity at the same or another facility - to increase the overall level of community-based services and, generally, improve access to a range of primary health services.

9. The project involves program restructuring intended to directly change the way in which health services are accessed or utilized by (a) the population of this community only, Score "3"; (b) the population of the entire region, Score "6"; or (c) a population base extending beyond one region, Score "9."

This criterion applies only to projects that involve restructuring of existing health programs in a way that will significantly change access to, and/or utilization of, those programs. Score based on how broad an impact this restructuring will have in terms of the population served by the program:

(a) the population residing in or near the community in which the facility is located who have historically relied on this facility for service;

(b) the population of an entire region. This facility is, or will be, the single service location for the health program within a region; or

(c) the population of this region and other regions that rely on this facility to provide the health program. This category also recognizes new "partnership" arrangements between regions.

10. The health authority has adopted a plan to reduce or maintain the number of institutional continuing care beds in the region to 50 per 1000 persons 65 years and older by March 31, 1996. Score "3" if there is a regional plan to achieve this target. Score an additional "1.5" if this project includes a reduction in continuing care bed capacity.

This criterion applies to projects in health regions where total regional continuing care beds in service will not exceed the provincial target as of March 31, 1996. The regional continuing care bed supply should not include community housing options developed, or being developed, using facilities acquired or constructed without provincial capital grants.

11. The health authority has approved a plan to reduce total regional acute care beds by closing, downsizing or converting hospitals. Score "3" if there is a regional plan to reduce the acute care bed supply. Score an additional "1.5" if the project will result in a reduction in acute care or mental health bed capacity at this facility.

This criterion applies to health regions that have demonstrated a commitment to the provincial strategy of attaining an acute care bed ratio of 2.4 per 1000 population by reducing total regional acute care beds in service. No specific acute care bed target must be achieved within the region; however, a net reduction must be evident. This criterion also applies to health regions where existing acute care beds in service is already less than 2.4 per 1000 population.